



Australia's
Global
University



COMD5004

Climate Change Adaptation & Development

Term Two // 2019

Course Overview

Staff Contact Details

Convenors

Name	Email	Availability	Location	Phone
Krishna Shrestha	krishna.shrestha@unsw.edu.au	By email appointment	Morven Brown G17	93851413

Lecturers

Name	Email	Availability	Location	Phone
Zeenat Mahjabeen	z.mahjabeen@unsw.edu.au	By email appointment		

School Contact Information

School of Social Sciences

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Course Details

Credit Points 6

Summary of the Course

Have you ever wondered how climate change affects the lives and livelihoods of the poorest people in developing countries? This course exposes you to key themes in the climate change adaptation and international development debate and enables you to critically understand the climate change and development issues affecting the capacity and well-being of local communities in Australia and developing countries. The course examines how local level responses to climate change are shaped by multi-level climate governance processes, exposes inequities in adaptation responses to climate change impacts, and explores how these adaptations can better respond to the needs of poor and disadvantaged communities

Course Learning Outcomes

1. Identify and explain the range of concepts, policies and practice of climate change adaptation in relation to development studies
2. Critically analyse climate change adaptation policy and practices in different contexts using case studies
3. Propose pathways and options for reducing community vulnerability and enhancing resilience
4. Undertake critical social science research and analysis, independently and in a team environment, and further develop research, interpersonal, communication and teamwork skills

Teaching Strategies

All aspects of this course follow a student-focused approach to teaching and learning. The learning outcomes of this course will be addressed through a balanced combination of different teaching activities. You will actively participate in seminars, in-class reading, discussion groups and online Moodle forums. Seminars are conceived of as an interactive learning activity where you can ask questions, clarify concepts and explore solutions to climate change problems.

Assessment

This course has been organised with a mix of face to face seminars, online/ reading activities and an Intensive Day over a weekend. In Term 2 this Intensive Day will on Saturday 6 July, from 9.30am to 4.30pm in Morven Brown G6. Please see the Moodle course page for more details.

Intensive Day: 6 July 2019 (Saturday 9.30 to 4.30): Searching for equity:Climate Change Adaptation in India.

Students will be assigned to a Student Learning Group early on the course. The aim of these groups is to discuss key issues and questions related to the readings of the day. Group discussions and group work will be fundamental for the preparation of student-led presentations during the Intensive Day. It is expected that group will work constantly throughout the semester. In Week 1 you will be put into a group and you will stay in these groups for the entire semester. There will be about **5 groups**. The allocation of a particular theme to a group will be decided in the first seminar session.

Assessment Tasks

Assessment task	Weight	Due Date	Student Learning Outcomes Assessed
Essay	30%	12/07/2019 11:55 PM	1,3,4
Assignment: In-class Group Presentation	20%	Not Applicable	2,3,4
Policy Analysis Report	50%	09/08/2019 11:59 PM	2,3,4

Assessment Details

Assessment 1: Essay

Start date: Not Applicable

Length: 800 words

Details: Students are required to write an individual essay on conceptual advances related to climate vulnerability and adaptation in relation to enhancing equitable outcomes in adaptation to climate change. This essay should be up to 800 words in length excluding references. Assessment criteria and standards are clearly outlined in the course outline and discussed with the students at the beginning of the semester. Essay will be marked and returned to students with written feedback attached with their report about 3 weeks after the due date of the report. The feedback will clearly outline how students can improve their learning outcomes.

Additional details:

ESSAY THEME:

Provide a critical review of concepts related to vulnerability to climate change and equitable adaptation

In developing an essay, you might like to employ one of the following strategies: a) involves the application of material from one or more seminars and discussion modules of the course in exploring a specific conceptual and practical aspect, or b) integrate materials from two or more seminars/discussions from the course to explore a specific problem or issue. The essay should demonstrate your understanding and application of concepts and principles learnt in this course. It should involve critical analysis and application of material and not simply be a regurgitation of the material provided in the readings. The readings in the course should be a starting point for further substantial research. This is an excellent opportunity for you to foster your own interests with substantial research into an appropriate topic area. Some theoretical/conceptual literature that you review in this assignment can also be used as a foundation for the next assignment – planning/policy report. The essay should be prepared as a critical literature review paper. It must be completely your own work. Ideas and material drawn from the work of others must be fully acknowledged.

Additional guidance on writing the essay will be offered through the Moodle.

Turnitin setting: This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Assessment 2: Assignment: In-class Group Presentation

Start date: Not Applicable

Details: Students will be required to work in a group throughout the semester and deliver a group presentation in the class. Assessment criteria and standards are clearly outlined in the course outline and discussed with the students at the beginning of the semester. Feedback on presentation will be provided on and after the presentation. Peer feedback will also be obtained for students. The feedback will clearly outline how students can improve their learning outcomes.

Additional details:

Presentation and Summary (20%)

This assessment task has two elements:

a) Group presentation during the Intensive day including PowerPoint slides and 300 words summary of the group presentation (10%)

- Student Groups will work together and develop a presentation, summarising the key ideas, issues and questions based on their readings and discussion relevant to their particular theme
- The group delivers a PowerPoint presentation during the Intensive day
- All members must deliver the presentation. But the group can decide strategies – e.g. how one

member is going to present in relation to the other member, how they are going to respond to questions, and how they are going to organise group work, and engage the rest of the class during and after the presentation, posing questions to stimulate thinking and discussion.

- Marks are equally distributed to all members.
- PowerPoint slides and summary must be submitted to the Lecturer via email within two days of the presentation.

2. Individual presentation(in-class), including PowerPoint slides and 300 words summary (10%)

- Each student chooses one of the six available topics for presentation and develops a presentation. Student needs to choose a topic by 11 July and let the course convenor know by email.
- The in-class presentation (Individual) provides you with the opportunity to focus on the topic of your interest, read critically and develop/ demonstrate your understanding through articulation and confident presentation in front of an informed audience.
- PowerPoint slides and summary must be submitted to the Lecturer via email within two days of the presentation.

Turnitin setting: This is not a Turnitin assignment

Assessment 3: Policy Analysis Report

Start date: Not Applicable

Length: 1500 words

Details: Students are required to write a policy analysis report by investigating a case study related to any one of these themes: forest, agriculture, food security, coastal settlements, and urbanisation, in a country (or a region). The report should be up to 1500 words in length excluding references. Assessment criteria and standards are clearly outlined in the course outline and discussed with the students at the beginning of the semester. Policy Analysis Report will be marked and returned to students with written feedback attached with their report. The feedback will clearly outline how students can improve their learning outcomes.

Additional details:

The case study provides you with the opportunity to investigate in some depth the case study region of your interest and a choice of any one of these themes: forest, agriculture, human health, food security,

coastal settlements, and urbanisation. You are advised to follow the following steps in planning your policy/planning analysis report:

1. choose a thematic focus (such as gender, or poverty, slums) and a country/ region (such as Bangladesh/ Nepal/ Australia). This makes your topic something like this: Gender in climate adaptation policy and planning in Bangladesh: a critical analysis. You can frame your topic for your choice of region and theme in a similar way.
2. collect and analyse data and organise your report according to the following outline:

1. **Introduction** - say what you are going to say; define the objectives of your essay (~100 words). You formulate a set of aims/objectives and structure the report according to the ideas you will present. You may like to expand (not to repeat) the ideas and arguments presented in Assignment 1.
2. **General context** of the region and the theme of your choice - provide general contextual information, trends, issues related to the theme and regions and the nature of climate challenge (~300 words)
3. **The policy and planning dynamics ('playing field')** - map out actors, policies, plans, including their histories, how formulated, key highlights of the plans/policies (~800 words). The use of relevant data tables, figures, maps and other evidence are helpful to develop and present the case in a more convincing manner.
4. **Analysis of the links between policy frameworks / plans** (including the playing field) on the adaptation practices (or in exacerbating vulnerability), including an analysis of challenges and opportunities created by the policy/plans for fair and equitable adaptation (~200 words).
5. **Conclusion** - identify main points about how policy / planning have affected adaptation, and what lessons can be learnt from the case/theme (~100 words)
6. **Bibliography**
7. **Endnotes**

Attendance Requirements

Students are expected to be regular and punctual in attendance at all classes in the courses in which they are enrolled. All applications for exemption from attendance at classes of any kind must be made in writing to the Course Authority. A student who attends less than eighty per cent of the classes within a course may be refused final assessment. This means that *if you do not attend at least 80% of possible classes your final assignment or exam may receive a mark of zero*. You are responsible for keeping track of your attendance and contacting your course convenor immediately if you are concerned about your attendance record and its impact on your ability to complete your course successfully.

Course Schedule

[View class timetable](#)

Timetable

Date	Type	Content
Week 1: 3 June - 7 June	Seminar	6 June Course Introduction and framework for the course: <i>Introducing a framework for COMD5004 in climate change adaptation Group formation, planning and scheduling of activities, communication etc.</i>
Week 2: 10 June - 14 June	Seminar	13 June Vulnerability and climate change adaptation We explore concepts and issues related to and vulnerabilities to climate change. what do we mean by the vulnerability? What are the critical perspectives and major issues? Discussions are embedded within the seminar where student groups are expected to share their views drawing on readings
Week 3: 17 June - 21 June	Seminar	20 June: Climate justice and equity What is climate justice? How equity is defined? What are the critical areas of justice issues that are relevant for climate adaptation? Discussions are embedded within the seminar where student groups are expected to share their views drawing on readings
Week 4: 24 June - 28 June	Group Work	27 June : No Class Readings and Intensive preparation week

		Reading, preparation, and group work continue in preparation for intensive day.
Week 5: 1 July - 5 July	Intensive	<p>4 July - NO CLASS but student groups work together to prepare for the Intensive day on 6 July.</p> <p>Intensive Day - 6 July 2019 (Saturday)</p> <p>Time: 9.30-4.30pm</p> <p>Venue: Morven Brown G6</p> <p>We examine key issues of climate change adaptation in India. The intensive day is divided into three parts. In the first, lecturer will provide a basic introduction of the intensive day, re-iterating key concepts and themes and providing a focus for the intensive day. The second part will involve the Student Learning group to finalise their presentation. The third part is the sharing by these groups which also include question and answer sessions. The Day will conclude by a summary of discussions.</p> <p><i>Themes for the Student Learning Groups for presentation:</i></p> <p>Theme 1) Poverty and climate change adaptation</p> <p>Theme 2) Gender and climate adaptation</p> <p>Theme 3) Indigenous peoples and climate adaptation</p> <p>Theme 4) NGOs and foreign aid in climate adaptation</p> <p>Theme 5) Local government planning and policy for urban climate change adaptation</p>
Week 6: 8 July - 12 July	Online Activity	<p>11 July:</p> <p><i>No Class - Reflection / Reading week</i></p>

		<p>Reflection on the Intensive day; <i>each student will write a 300 words reflection and submit this summary to krishna.shrestha@unsw.edu.au by 11.59pm, 12 July. No submission or late submission will result in you being absent for this seminar.</i></p> <p>Essay due on 12 July, Friday by 11.59pm (submission online using turnitin)</p>
Week 7: 15 July - 19 July	Online Activity	<p>18 July</p> <p>No Class - <i>Online activity week</i>(in lieu of Class 7)</p> <p><i>After completing your reading allocated for this week (a minimum of two articles), each student will write a 300 words summary and submit this summary to krishna.shrestha@unsw.edu.au by 11.59pm, 28 June. No submission or late submission will result in you being absent for this seminar.</i></p>
Week 8: 22 July - 26 July	Presentation	<p>25 July</p> <p>Individual Presentation - 1</p> <p>Every student in the class will have been allocated to one of the topic areas for presentation to the class. The presentation will aim to engage fellow students with a specific focus on case studies of topical issues around which student will share insights and resources. Themes are:</p> <ol style="list-style-type: none"> 1. Global climate change politics and institutions 2. Local government in climate change adaptation
Week 9: 29 July - 2 August	Presentation	<p>1 August:</p> <p>Individual Presentation - 2</p> <p>Topics:</p> <ol style="list-style-type: none"> 3. Climate refugee and migration

<p>Week 10: 5 August - 9 August</p>	<p>Presentation</p>	<p>4. Flooding and climate change</p> <p>8 August:</p> <p>Individual Presentation - 3</p> <p><i>Topics:</i></p> <p>5. Community forestry and climate adaptation</p> <p>6. Water security and climate change</p> <p><i>CASE ANALYSIS REPORT: Due: 11.59pm Friday, 9 Aug (50%)</i></p>
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Resources

Prescribed Resources

Week 1 INTRODUCTION

Introductory readings:

Adger, W.N., (2006) *Fairness in adaptation to climate change*: The MIT Press.

Adger, W.N., Huq, S., Brown, K., Conway, D. & Hulme, M. (2003). *Adaptation to climate change in the developing world. Progress in Development Studies*, 3, 179-195.

Adger, W.N., S. Agrawala, M.M.Q. Mirza, C. Conde, K. O'Brien, J. Pulhin, R. Pulwarty, B. Smit and K. Takahashi (2007), *Assessment of adaptation practices, options, constraints and capacity*. *Climate Change 2007: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 717-743.

Barnett, J. & J Campbell (2010) *Climate change and small island states: power, knowledge, and the South Pacific*: Earthscan.

Barnett, Jon, and Saffron O'Neill (2010) "Maladaptation." *Global Environmental Change* 20 (2): 211–213.

Cannon, T. & Muller-Mahn, D (2010). *Vulnerability, resilience and development discourses in context of climate change. Natural Hazards*, 55, 621-635.

Giddens, A. (2009). *The politics of climate change*: Cambridge (Chapters 1, 7)

IPCC, 2007: *Summary for Policymakers*. In: *Climate Change (2007) Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 7-22.

Paavola, J., Adger, W.N. & Huq, S., 2006. *Multifaceted justice in adaptation to climate change. Fairness in adaptation to climate change*, 263-277.

Rickards, L, and S M Howden (2012) *Transformational Adaptation: Agriculture and Climate Change. Crop and Pasture Science* 63 (3): 240.

Week 2 VULNERABILITY

Adger, W.N., 2006. *Vulnerability. Global Environmental Change*, 16,268-281.

Brouwer, R., Akter, S., Brander, L. & Haque, E., 2007. *Socioeconomic vulnerability and adaptation to environmental risk: a case study of climate change and flooding in Bangladesh. Risk*

Analysis, 27,313-326.

Cutter, S.L., 1996. Vulnerability to environmental hazards. *Progress in Human Geography*, 20,529-539.

Ribot, Jesse C. (2010), Vulnerability does not just Fall from the Sky: Toward Multi-scale Pro-poor Climate Policy, II in Robin Mearns and Andrew Norton (eds.), *Social Dimensions of Climate Change: Equity and Vulnerability in a Warming World*. Washington, DC: The World Bank.

Wisner, B., Blaikie, P., Cannon, T. & Davis, I., 2004. *At risk: natural hazards, people's vulnerability and disasters*: Psychology Press. (Chapter 1 & 2)

Week 3 CLIMATE JUSTICE AND EQUITY

Paavola, J. and W. N. Adger (2006). "Fair adaptation to climate change." *Ecological Economics* 56(4): 594-609.

Adger W Neil, Jouni Paavola, and Saleemul Huq. 2006. Toward Justice in Adaptation to Climate Change. In: Adger, W.N., Paavola, J., Huq, S. & Mace, M.J., 2006. *Fairness in adaptation to climate change*: The MIT Press (Chapter 1).

Thomas, D.S. & Twyman, C., (2005). Equity and justice in climate change adaptation amongst natural-resource-dependent societies. *Global Environmental Change*, 15,115-124.

Sze, Julie, and Jonathan K London. 2008. "Environmental Justice at the Crossroads." *Sociology Compass* 2 (4): 1331–1354.

Eriksen, S. H. and K. O'BRIEN (2007), Vulnerability, poverty and the need for sustainable adaptation measures." *Climate Policy* 7(4): 337-352.

Ebi, K. L. (2009). "Facilitating climate justice through community-based adaptation in the health sector." *Environmental Justice* 2(4): 191-195.

Week 4 ADAPTATION AND RESILIENCE

Nelson, D. R. (2011). "Adaptation and resilience: responding to a changing climate." *Wiley Interdisciplinary Reviews: Climate Change* 2(1): 113-120.

Folke, C. (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. *Global Environmental Change*, 16,253-267.

Kates, R.W., Travis, W.R. & Wilbanks, T.J (2012) Transformational adaptation when incremental adaptations to climate change are insufficient. *Proceedings of the National Academy of Sciences*, 109,7156-7161.

Nelson, D. R., W. N. Adger and K. Brown (2007). "Adaptation to environmental change: contributions of a resilience framework." *Annual Review of Environment and Resources* 32(1): 395.

Birkmann, Jörn, and Korinna Teichman (2010). Integrating Disaster Risk Reduction and Climate Change Adaptation: Key Challenges—Scales, Knowledge, and Norms.” *Sustainability Science* 5 (2) 171–184.

Week 5 Community participation in adaptation to climate change

Arnstein, S. (1969), A ladder of citizen participation, *Journal of American Institute of Planning*, Vol.35, No.4, pp.216-224.

Mahjabeen, Z. and Shrestha, K. K. (2011), Civic science, community participation and planning for knowledge-based development: analysis of Sydney Metropolitan Strategy, *International Journal of Knowledge-Based Development*, Vol.2, No.4, pp.412-432.

Agrawal, A. and Gibson, C. (1999), Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation, *World Development*, vol.27, no.4, pp. 629-649.

Shrestha, K. K. and McManus, P. (2008), The politics of community participation in natural resource management, lessons from community forestry in Nepal, *Australian Forestry*, Vol.71, No.2, pp.135-146.

Brett, E. (2003) 'Participation and accountability in development management,' *Journal of Development Studies*, Vol. 40, No. 2, 2003, pp. 1-29.

Cornwall, A. (2008) 'Unpacking 'Participation': models, meanings and practices', *Community Development Journal*, Vol., 43, pp. 269-283.

Innes, J. and Booher, D. (2004), Reframing Public Participation: Strategies for the 21st Century, *Planning Theory & Practice*, vol. 5, no. 4, pp. 419–436.

Week 6 Adaptation Planning

Fussler, H.-M. (2007). "Adaptation planning for climate change: concepts, assessment approaches, and key lessons." *Sustainability Science* 2(2): 265-275.

Few, R., K. Brown and E. L. Tompkins (2007). "Public participation and climate change adaptation: avoiding the illusion of inclusion." *Climate Policy* 7(1): 46-59.

Burton, I., Huq, S., Lim, B., Pilifosova, O. & Schipper, E.L. (2002). From impacts assessment to adaptation priorities: The shaping of adaptation policy. *Climate Policy*, 2,145-159.

Review of national climate change strategy documents, National Adaptation Plan of Action (NAPA), and other grey / published literature available in the internet.

Week 7 Public Policy in Climate change adaptation

Lim, Bo, Erika Spanger-Siegfried, Ian Burton, Elizabeth L Malone, and Saleemul Huq. 2009. "Adaptation Policy Frameworks for Climate Change: Developing Strategies, Policies and Measures. UNDP and

Cambridge University Press

Urwin, K. and A. Jordan (2008). "Does public policy support or undermine climate change adaptation? Exploring policy interplay across different scales of governance." *Global Environmental Change* 18(1): 180-191.

Ingold, K. and F. Varone (2012). "Treating policy brokers seriously: Evidence from the climate policy." *Journal of Public Administration Research and Theory* 22(2): 319-346.

Metz, B. & Kok, M. (2008). Integrating development and climate policies. *Climate Policy*, 8,99-102.

Oreskes, N. (2004). "Science and public policy: what's proof got to do with it?" *Environmental Science & Policy* 7(5): 369-383.

Week 8 Reading and online learning activity

IPCC. (2007). *Climate Change: Impact, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Chapters 3-6, & 8*

Edwards, F, J. Dixon, S. Friel, G Hall, K Larsen, S Lockie, B Wood, et al. (2011). Climate Change Adaptation at the Intersection of Food and Health. *Asia-Pacific Journal of Public Health* 23 (2 Suppl): 91S–104S.

Lobell, D.B., Burke, M.B., Tebaldi, C., Mastrandrea, M.D., Falcon, W.P. & Naylor, R.L (2008). Prioritizing climate change adaptation needs for food security in 2030. *Science*, 319,607-610.

Kirilenko, A.P. & Sedjo, R.A., (2007) Climate change impacts on forestry. *Proceedings of the National Academy of Sciences*, 104,19697-19702.

McGranahan, G., D. Balk, and B Anderson (2007) The Rising Tide: Assessing the Risks of Climate Change and Human Settlements in Low Elevation Coastal Zones." *Environment and Urbanization* 19 (1): 17–37.

Week 9 Reading and online learning activity

IPCC. (2007). *Climate Change: Impact, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Chapters 3-6, & 8*

Mirza, M Monirul Qader (2010). Climate Change, Flooding in South Asia and Implications. *Regional Environmental Change* 11 (S1): 95–107..

Xu, J., Grumbine, R.E., Shrestha, A., Eriksson, M., Yang, X., Wang, Y. & Wilkes, A. (2009) The melting Himalayas: Cascading effects of climate change on water, biodiversity, and livelihoods. *Conservation Biology*, 23, 520-530.

Barnett, J. (2001). "Adapting to climate change in Pacific Island Countries: The problem of uncertainty." *World Development* 29(6): 977-993.

Brouwer, R., S. Akter, L. Brander and E. Haque (2007). "Socioeconomic vulnerability and adaptation to environmental risk: a case study of climate change and flooding in Bangladesh." *Risk Analysis* 27(2): 313-326.

Week 10 Community-scale adaptation

Agrawal, A. & Perrin, N. (2009). Climate adaptation, local institutions and rural livelihoods. *Adapting to climate change: thresholds, values, governance*, 350-367.

Dodman, D. & Mitlin, D. (2013). Challenges for community-based adaptation: discovering the potential for transformation. *Journal of International Development*, 25 (5): 640-659

Paudel, Naya S, Dil B Khatri, Hemant Ojha, Rahul Karki, and Niru Gurung (2013) Integrating Climate Change Adaptation with Local Development: Exploring Institutional Options." *Journal of Forest and Livelihood*: 11 (1), p1-13

Satterthwaite, D. (2011). How can urban centers adapt to climate change with ineffective or unrepresentative local governments? *Wiley Interdisciplinary Reviews: Climate Change*, 2, 767-776.

van Aalst, Maarten K, Terry Cannon, and Ian Burton. (2008). "Community Level Adaptation to Climate Change: the Potential Role of Participatory Community Risk Assessment." *Global Environmental Change* 18 (1): 165–179.

Readings you may like to consider:

Hardee, Karen, and Clive Mutunga. 2009. "Strengthening the Link Between Climate Change Adaptation and National Development Plans: Lessons From the Case of Population in National Adaptation Programmes of Action (NAPAs)." *Mitigation and Adaptation Strategies for Global Change* 15 (2): 113–126.

Saleemul Huq and Mizan R. Khan. 2006. Equity in National Adaptation Programs of Action (NAPAs): The Case of Bangladesh.

Ojha, H (2013). Counteracting hegemonic powers in policy process: critical action research in Nepal's forest governance. *Critical Policy Studies*.

Vogel, C., S. C. Moser, R. E. Kasperson and G. D. Dabelko (2007). "Linking vulnerability, adaptation, and resilience science to practice: Pathways, players, and partnerships." *Global Environmental Change* 17(3): 349-364.

Students are advised to collect information from the internet – both grey and published - to explore policy and planning solutions to the challenges of adaptation and equity in regions of their choice.

Climate change & disasters

Ojha, H.R., Paudel, N.S., Banjade, M.R., McDougall, C. & Cameron, J. (2010), The deliberative scientist: integrating science and politics in forest resource governance in Nepal. In L. German, J.J. Ramisch & R. Verma (eds.) *Beyond the Biophysical: Knowledge, Culture, and Politics in Agriculture and Natural Resource Management*. Dordrecht, Heidelberg, London and New York: Springer, 167-191.

Ojha, H and Andy Hall (2012) *Confronting Challenges in Applying Adaptive Collaborative Approaches: Lessons from Practice*, In: Ojha et al, *Adaptive Collaborative Approaches to Natural Resource Governance*

Shrestha, K. K., Ojha, H. & Bhattarai, B. (*Forthcoming*), Disaster (in)justices in Nepal's earthquake recovery, In Douglass, M. and Miller, M., *Disaster Justice in the Asia Pacific*, MIT Press (Accepted 28 December 2016).

Aryal, K. R. (2014), International Journal of Disaster Risk Reduction, *International Journal of Disaster Risk Reduction*, vol. 9(C), pp. 137–146.

Heltberg, R. (2007), Helping South Asia cope better with natural disasters: The role of social protection. *Development Policy Review*, vol. 25, no. 6, pp. 681-698

Recommended Resources

Resources that you may like to read:

Abramovitz, J., Banuri, T., Girot, P. O., Orlando, B., Schneider, N., Spanger-Siegfried, E., Switzer, J., Hammill, A. (2002), *Adapting to Climate Change: Natural Resource Management and Vulnerability Reduction*, Background Paper to the Task Force on Climate Change, Adaptation and Vulnerable Communities, World Conservation Union (IUCN), Worldwatch Institute International Institute for Sustainable Development (IISD), Stockholm Environment Institute/Boston.

Allen, P. A. and Hoffman, P. F., (2005), Extreme winds and waves in the aftermath of a Neoproterozoic glaciation, *Nature*, 433, pp.123 - 127.

Beatley, T. (1998), The vision of sustainable communities, in Burby, R. (ed.) *Cooperating with Nature: Confronting Natural Hazards with Landuse Planning for Sustainable Communities*, R.J. Joseph Henry Press Washington DC, pp.233–262.

Beatley, T. and Berke, P.R. (1997), *After the Hurricane: Linking Recovery to Sustainable Development in the Caribbean*, Johns Hopkins University Press, Baltimore.

Beatley, T. and Manning, K. (1997), *The Ecology of Place: Planning for Environment, Economy and Community*, Island Press, Washington DC.

Berke, P. R. (2002), Does Sustainable Development Offer a New Direction for Planning? Challenges for the Twenty-First Century, *Journal of Planning Literature*, 17(1), pp.21-36.

Blakely, E. J. (2004), Suburbs as sustainable communities: a paradigm for the future, *Australian Planner*, 40(4).

Bobertz, B. (1991), *Public Participation in Environmental Regulation*, The Environmental Law Institute,

Washington, DC.

Burby, R. J. (ed.) (1998), *Co-operating with Nature: confronting natural hazards with land-use planning for sustainable communities*, Island Press, Washington, DC.

Burby, R. J. (1999), Unleashing the power of planning to create disaster-resistant communities, *Journal of the American Planning Association*, 65, pp.247–258.

Burby, R. J. (2001), Urban containment policy and exposure to natural hazards: is there a connection? *Journal of Environment Planning and Management*, 44, pp.475–490.

Calthorpe, P. (1993) *The Next American Metropolis: Ecology, Community, and the American Dream*, Princeton Architectural Press, New York.

Cox, P. M., Betts, R. A., Jones, C. D., Spall, S.A. and Totterdell, I. J. (2000), Acceleration of global warming due to carbon-cycle feedbacks in a coupled climate model, *Nature*, 408, pp.184–187.

Crowley, T J. 2000. Causes of Climate Change Over the Past 1000 Years. *Science* 289 (5477): 270–277.

Dolan, A. H. and Walker, I. J. (2004), Understanding vulnerability of coastal communities to climate change related risks, *Journal of Coastal Research*, 39.

Dessler, A. & Parson, E.A., 2009. *The science and politics of global climate change: A guide to the debate*: Cambridge University Press.

Dobson, A. (1998). *Justice and the Environment: Conceptions of Environmental Sustainability and Theories of Distributive Justice*. Oxford: Oxford University Press.

Ensor, J. & Berger, R., 2009. *Understanding climate change adaptation: lessons from community-based approaches*: Practical Action Pub.

Ericksen, N. J., Berke, P. R., Crawford, J. L., and Dixon, J. E. (2004), *Plan-making for Sustainability: The New Zealand Experience*, Aldershot, Hants.

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Some relevant journals include:

Global Environmental Change, Nature, Science, Nature climate Change, PNAS

Climatic Change, Nature Climate Change,

Climate policy, Environmental Science and Policy, Climate and Development

IDS Bulletin

Journal of Development Studies

Journal of International Development

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Mitigation and Adaptation Strategies for Global Change

Regional Environmental Change

Urban Climate, American Journal of Climate Change

World Development, Climate and Development

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Course Evaluation and Development

Student feedback is gathered periodically using, among other means, UNSW's myExperience process. Informal feedback and class-generated feedback are important. A brief survey will be conducted around the middle of the semester to identify areas of student issues. Analysis of feedback will inform the reasonable adjustment of course content and delivery where possible. Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback. Changes to the course will be introduced to subsequent cohorts of students taking the course.

Submission of Assessment Tasks

Submission of Assessment Tasks

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For information on how to submit assignments online via Moodle: <https://student.unsw.edu.au/how-submit-assignment-moodle>

Academic Honesty and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

Copying: using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This also applies to images, art and design projects, as well as presentations where someone presents another's ideas or words without credit.

Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original structure and/or progression of ideas of the original, and information without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.

Collusion: working with others but passing off the work as a person's individual work. Collusion also includes providing your work to another student before the due date, or for the purpose of them plagiarising at any time, paying another person to perform an academic task, stealing or acquiring another person's academic work and copying it, offering to complete another person's work or seeking payment for completing academic work.

Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.

Duplication ("self-plagiarism"): submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

Correct referencing practices:

- Paraphrasing, summarising, essay writing and time management
- Appropriate use of and attribution for a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre (<http://www.lc.unsw.edu.au/>). Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items.

UNSW Library also has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time

- understand your rights and responsibilities as a student at UNSW
- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

Some of these areas will be familiar to you, others will be new. Gaining a solid understanding of all the related aspects of ELISE will help you make the most of your studies at UNSW.

<http://subjectguides.library.unsw.edu.au/elise/aboutelise>

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For essential student information relating to:

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